

**REMARKS/ARGUMENTS**

Reconsideration of this application and entry of the foregoing amendments are respectfully requested.

Claims 1, 4 and 5 have been revised to define the invention with additional clarity. The claims as presented are fully supported by an enabling disclosure.

Claims 1, 4 and 5 stand objected to. Withdrawal of the objection is submitted to be in order in view of the revision of claim 1 to conform with proper Markush format and the revision of claims 1, 4 and 5 to place the reference characters in parentheses. Reconsideration is requested.

Claims 1, 3-6, 8, 14, 17, 18, 22 and 24 stand rejected under 35 USC 112, second paragraph as allegedly being indefinite. Withdrawal of the rejection is submitted to be in order in view of the above-noted claim revisions and comments that follow.

Claim 1 has been revised to recite the transitional phrase “comprising”.

The Examiner’s comments regarding the definitions of “R” and “R<sup>L</sup>” in claim 1 are noted and the above-noted revision of the claim is believed to address the Examiner’s concerns.

Reconsideration is requested.

Claims 1, 3-6, 8, 14, 22 and 24 stand rejected under 35 USC 112, first paragraph, as allegedly lacking written description. Withdrawal of the rejection is submitted to be in order for the reason that follow.

At the outset, Applicants direct the Examiner’s attention to the fact that the subject application demonstrates no less than 80 different and highly varied compounds and six different bacterial strains ranging from gram positive to gram negative and including sensitive and resistant strains. The Examiner’s assertions to the contrary, the extensive nature of Applicants’

disclosure leaves no doubt but that Applicants had full possession of the invention as claimed at the time of filing.

The written description provided here stands in marked contrast to that in In re Gostelli, where two compounds were disclosed, and that in Carnegie Mellon Univ. v Hoffman-LaRoche Inc., where the polA gene from one bacterial source was disclosed while the claims encompassed all bacterial species.

The Examiner contends that the specification does not disclose a method of synthesis of the compounds of formula (I). Respectfully, the claims are directed to a new use for compounds known in the art. The synthesis of such compounds would have been apparent to those of ordinary skill.

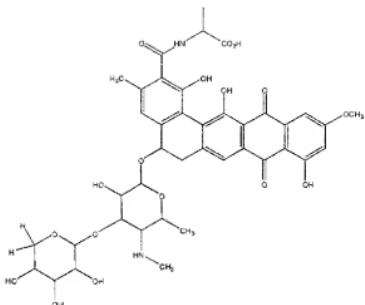
The Examiner also contends that the level of skill in the art for a method of inhibiting bacterial growth is low. Applicants respectfully submit such is not the case and urge the Examiner to provide support for her assertion.

The written description requirement for the claimed genus is fully satisfied by the subject disclosure which describes the claimed invention in such a way that one skilled in the art would have understood that Applicants had full possession of that genus at the time of filing.

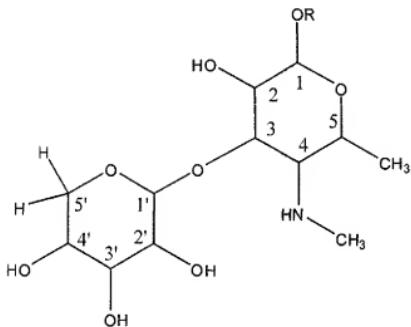
Claim 1 stands rejected under 35 USC 103 as allegedly being obvious over Oki et al in view of Okuyama et al. Withdrawal of the rejection is submitted to be in order for the reasons that follow.

As indicated by the Examiner, Oki et al teach that Pradimicin A is an anti-fungal antibiotic that exhibits antibacterial activity against *M. luteus*, a bacterium.

Pradimicin A has the following structure:

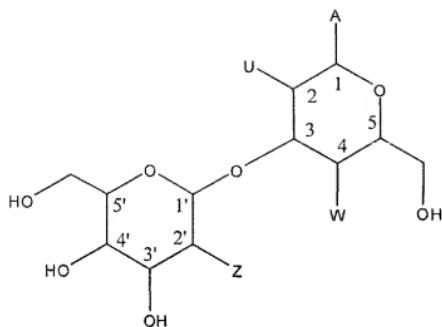


For convenience, the structure can be represented as follows where the aglycone portion is simply referred to as R where the ring carbons have been numbered according to the IUPAC convention:



In Pradimicin A, R is a C28 pentacyclic aromatic moiety.

To allow a suitable comparison, the structures recited in the claims as now presented are drawn in a similar manner and can be represented as follows:



A can be either H, SR or OR where R is a group with 20 or less carbon atoms, that is, significantly less than the 28 carbons of Pradimicin A.

The groups at positions 5' and 5 are now limited to hydroxymethylene moieties, consistent with the examples in the specification. Pradimicin does not have a hydroxymethylene moiety at either position 5 or 5' in its structure, nor would there have been any suggestion that such moieties would be of use.

As the Examiner points out, Okauyama et al teaches variations of Pradimicin A in which the N-methyl moiety is varied from C1 to C5 alkyl. The differences in the anomeric R group and the presence of hydroxymethylene moieties at positions 5 and 5' represent significant departures from the compounds of Okauyama et al. Noting in Okauyama et al, taken in combination with Oki et al, would not have brought one closer to the instant invention.

Summarizing, the combination of references upon which the Examiner relies would in no way have suggested the presently claimed invention. Accordingly, reconsideration is respectfully requested.

Claims 1, 3-6, 8, 14, 22 and 24 stand rejected under 35 USC 112, first paragraph, as allegedly being non-enabled. Withdrawal of the rejection is submitted to be in order for the reasons that follow.

The enablement provided by the subject application is extensive (see, comments above responsive to the rejection based on lack of written description). As pointed out above and previously, the specification as filed provides a broad range of disaccharide compounds with a broad range of substituents targeted to a range of both gram negative and gram positive bacterial species, including both resistant and sensitive strains.

The Examiner again relies on the Merck Manual to support her position. In this regard, Applicants again direct attention to the fact that the Merck Manual teaches that various types of antibiotics (other than aminoglycosides, macrolides and linezolids) provide broad coverage. Accordingly, the Merck Manual is not supportive of the rejection.

As regards the Examiner's reference to compound 65 as being ineffective, Applicants again point out that the "+" indicates an MIC below 128  $\mu$ g/mL while the "-" indicates an MIC above 128  $\mu$ g/mL. The Examiner's assertions to the contrary, a "-" does not indicate that compound 65 is ineffective but merely that a higher concentration of compound 65 is required to achieve stasis in bacterial growth. Basis for the Examiner's comment that Applicants have set a threshold for determining effectiveness at 128  $\mu$ g/ml is not seen,

Finally, Applicants note that claim 14 recites a specific bacterial species in conjunction with specific compound species while claims 8 and 24 recite the specific bacterial species exemplified. Inclusion of these claims in the rejection is clearly inappropriate.

Applicants maintain that the skilled person would understand how to take any of the compounds of the invention and inhibit bacterial growth without undue experimentation and with an expectation of success. Accordingly, reconsideration is requested.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

Respectfully submitted,

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